

Educational Adventures in the



Dunes

2006-2007

*A Teachers' Planning Guide to
Environmental Education Programs
in the Indiana Dunes*



Indiana Dunes Environmental Education

Indiana Dunes has a long, fascinating history of attracting scientists and students alike to study and explore globally rare ecosystems. The process of unlocking the mysteries of the Indiana dunes began in the late 1800s with Dr. Henry Cowles and continues today. In the spirit of further utilizing the Indiana dunes as an educational tool, organizations throughout the area offer a wide variety of environmental education programs. This Teachers' Planning Guide, "Educational Adventures in the Dunes," provides a comprehensive list of the many programs available. It is designed to assist educators and youth group leaders in understanding and using the resources available to them.

Each participating organization has its own section that explains its unique facilities and programs. Each program listed has:

- ◆ A brief description
- ◆ Information about program availability
- ◆ Appropriate age range
- ◆ Minimum and maximum group sizes
- ◆ Program cost (if applicable)
- ◆ The location and length of the program

Various teachers' workshops are listed in the first pages to showcase professional development opportunities available from the partner organizations. The uses of the Indiana Dunes as a valuable teaching tool are abundant. This guide will enable educators to choose the programs that are most appropriate for them and their particular group of learners and plan exciting excursions into a whole new world of educational opportunities.



Indiana Dunes National Lakeshore

The Indiana Dunes National Lakeshore was established in 1966 “to preserve for the educational, inspirational, and recreational use of the public certain portions of the Indiana dunes.” Today, the park is comprised of over 15,000 acres of dunes, oak savannas, swamps, bogs, marshes, prairies, rivers, and wetlands. The amazing variety of natural communities located within such a small geographic area makes the Indiana Dunes National Lakeshore a truly unique educational and recreational resource.

Thousands of students participate in education programs at the National Lakeshore every year. The park offers programs at various locations throughout Lake, Porter, and LaPorte Counties, such as the Paul H. Douglas Center for Environmental Education, the Dorothy Buell Memorial Visitor Center, the historic areas of Bailly Homestead and Chellberg Farm, and the natural areas and trails throughout the park. It is a wonderful place to bring students for ranger-led programs or for self-guided programs. Teacher activity guides are available upon request for West Beach and Miller Woods or can be downloaded from the National Lakeshore’s web site.

Discover

Goal: Explore nature’s diversity using the senses.

Discover the wonders of nature along a wooded trail by using your senses.

Program availability: Year-round except during Autumn Harvest and Maple Sugar Time

Age group: Preschool-3rd grade

Max. group size: 90

Location & Length: Douglas Center or Visitor Center, 1 hr.

The Chellbergs had a Farm

Goal: Experience and learn about Indiana’s early farming traditions.

Step back in time and discover farm life in the early 1900s. Feed pigs, horses, chickens, and a cow. Play farm games and visit an old time farm house.

Program availability: October 16-August 17

Age group: Preschool-3rd grade

Max. group size: 90

Location & length: Chellberg Farm, 1 hr.

Talk With the Animals

Goal: Become familiar with the wonders of animals of the dunes through the year.

Puppet characters come alive to tell a story of life in duneland adapted to the specific season. If weather permits, students are invited to hike the trail after the show.

Program availability: Year-round except during Autumn Harvest and Maple Sugar Time

Age group: Preschool-1st grade

Max. group size: 70

Location & length: Douglas Center or Visitor Center, 1 hr.

Autumn Harvest

Goal: Experience old-time life on a farm in the fall.

Sample harvest time at a turn-of-the-century farm. Gather sorghum, press cider, help with chores or play farm games. Enjoy the sights and smells of an old-time farmhouse and barn.

Program availability: September 25-October 13

Age group: All grades

Max. group size: 60

Location & length: Chellberg Farm, 1.75 hrs.



Indiana Dunes National Lakeshore

www.nps.gov/indu/forteachers

The National Lakeshore’s web site has a wealth of information for teachers and students. Students can play interactive games. Teachers can download activity guides, learn about professional development opportunities, and view a copy of this brochure.

Maple Sugar Time

Goal: Learn and experience the making of this purely American product.

Learn about “horse-power,” examine maple trees, and see the Native American, pioneer, and sugar shack methods of making maple sugar and syrup. Tour the Chellbergs’ 19th-century farmhouse and visit the animals in the barn.

Program availability: February 28-March 14

Age group: All grades

Max. group size: 60

Location & length: Chellberg Farm, 1.75 hrs.

Maple Sugar Time-Advanced

Goal: Investigate the science behind maple sugaring. Learn how farmers tend their “sugar bush.”

Assist the park in monitoring the health of the maple trees at Chellberg Farm through hands-on research and management techniques.

Program availability: February 28-March 14
(limited availability)

Age group: 6th-12th grade

Max. group size: 30

Location & length: Chellberg Farm, 2 hrs.

Fall Fanfare

Goal: Experience and learn about the changing of the seasons.

Cool weather and shorter days bring beautiful changes. Discover the flurry of activity as plants and animals prepare for winter.

Program availability: October and November

Age group: 1st-6th grade

Max. group size: 90

Location & length: Kemil Beach or Douglas Center, 2 hrs.

Winter Exploration

Goal: Experience and learn about the beauty and ecology of winter.

Explore the beauty of the winter woods during a nature hike after viewing an indoor slide show focusing on animal adaptations. Learn how plants and animals adapt to winter. Snowshoes are provided. If there is insufficient snow, a hike will be led.

Program availability: January 8-February 16

Age group: 3rd-6th grades

Max. group size: 36

Location & length: Visitor Center, 1.5 hrs.

Potawatomis and Fur Traders

Goal: Experience local history focusing on American Indian lifestyles and the fur trade.

Journey back in time to learn about the lifestyles of the American Indians, fur traders, and voyageurs during this period of change in Northwest Indiana.

Program availability: Year-round except during
Autumn Harvest and Maple Sugar Time

Age group: 3rd-8th grade

Max. group size: 90

Location & length: Bailly Homestead, 2 hrs.

A Grain of Truth

Goal: Explore the dunes and gain a personal experience of how they came to be.

Observe how winds and powerful waves work to create and erode moving sand dunes. Hike the foredunes and beach to learn about the processes of dune building, glaciation, and erosion.

Program availability: Spring/summer/fall

Age group: 4th-12th grade

Max. group size: 90

Location & length: West Beach or Mount Baldy, 1.5 hrs.

Lake Michigan Alive

Goal: Appreciate the diversity of life within this region’s most important natural resource and learn about some of the issues affecting Lake Michigan.

Dress a student as a fish. Play a food chain game. View preserved sea lamprey and trout. Students are encouraged to help care for the Great Lakes. This program is primarily indoors but does include a 30-minute trip to the lake.

Program availability: Year-round except during
Autumn Harvest and Maple Sugar Time

Age group: 4th-12th grade

Max. group size: 60

Location & length: Douglas Center, 1.5 hrs.
including beach hike

No charge for any National Lakeshore program.



Water World

Goal: Experience and explore the diversity of life within a wetland.

Armed with nets and pans, investigate the rich diversity of pond life and learn the importance of conserving our water resources. For a more in-depth experience, students take the 3-hour hike option to explore Lake Michigan's water resources.

Program availability: April-October

Age group: 4th-12th grade

Max. group size: 48

Location & length: Douglas Center, 2 or 3 hrs.

Habitat Hike

Goal: Learn about the importance of biodiversity through a hike into the National Lakeshore's many habitats.

Discover why the Indiana dunes has almost 1,400 species of plants, ranking it 4th highest of all National Park areas! Explore forest, dunes, a swamp, and sand prairie, while studying environmental factors that affect plant survival.

Program availability: Year-round except during Autumn Harvest and Maple Sugar Time

Age group: 4th-12th grade

Max. group size: 90

Location & length: Kemil Beach Parking Lot, 2 hrs.

Reflections on Snow

Goal: Appreciate and learn about the beauty and ecology of winter.

Discover the thrill of cross-country skiing. Indoor activities explore tracking, predation, and winter habitats. Ski equipment provided. If snow is insufficient, a hike will be led.

Program availability: January 8-February 16

Age group: 5th-12th grade

Max. group size: 60

Location & length: Douglas Center, 2.5 hrs.

Pinhook Bog

Goal: Learn about and appreciate this rare, fragile gift of the glaciers.

Hike into the strange and unique world of the bog. Walk on a floating mat of sphagnum moss and discover insect-eating plants.

Program availability: Mid-April through mid-November

Age group: 6th-12th grade

Max. group size: 30 (depending on staff availability)

Location & length: Meet at the visitor center, 1.5 hrs.
(includes travel time between Visitor Center and bog)

Secrets of Succession

Goal: Experience and appreciate the variety of plant communities found in the dunes.

Follow the legacy of early dunes scientist Henry Chandler Cowles and hike from the beach over foredunes and through forests. By exploring the environment, discover the forces that shape the dunes and produce this unique succession of plants.

Program availability: April-November

Age group: 6th-12th grade

Max. group size: 90

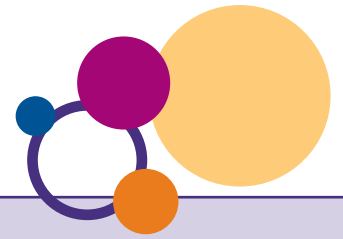
Location & length: West Beach, 2 hrs.

Dune SCOPES

High school students get involved in real life environmental projects and habitat restoration at the National Lakeshore. Conducted in partnership with the IDELC, this program can be a day or an overnight program. Meets service learning requirements for students. See page 13 for program details.

Potawatomi Ways Traveling Trunks

Two educational trunks that focus on Potawatomi lifestyles, culture, and the fur trade era are available for two-week periods to teachers in grades 1-2 and 3-4. Activity guides and resources are included in the kits along with replicas of tools, artifacts, and artworks. Contact the park's scheduling office to reserve a trunk.



NEW!

National Lakeshore Rangers Will Visit Your Schools and Groups!

Contact the park's scheduling office to reserve a school visit by a ranger during the following times:

- ◆ September 5-15
- ◆ November, December, January 8-February 16

To reserve a ranger site visit, please arrange for one large group or several small groups throughout the day to ensure at least 75 students can be reached. The site visits are also limited by the distance and weather. Rangers will conduct programs on a variety of subjects and will work with your school to create a site visit that meets your curricula needs.